

Clean Version of the Pending Claims Under 37 C.F.R. § 1.121(c)(3):

Sub E
D

1. (Thrice Amended) An interposer for electrically coupling a semiconductor device to an electrical apparatus, the interposer comprising:

an electrically insulative substrate for coupling to an electric apparatus, said substrate having a portion that has a uniform thickness, and said portion having a planar surface, said planar surface being part of a substrate outermost surface for receiving thereover a semiconductor device such that said semiconductor device lies at least in part over said outermost surface and is unimbedded into said substrate; and

an electrical conductor on the planar surface of the portion of the electrically insulative substrate, the electrical conductor having a receiving end on the planar surface of the portion of the electrically insulative substrate for connecting to a semiconductor device at electrically conductive terminals of said semiconductor device and such that at least some of said terminals are located in the region between said semiconductor device and said outermost surface of said substrate, and a terminal end on the planar surface of the portion of the electrically insulative substrate for connecting to an electrical apparatus, such that the coupling of said substrate to said electric apparatus structurally supports said substrate with said terminal end in electric contact with said electric apparatus.

D2

2. (Once Amended) An interposer as recited in claim 1, wherein the substrate comprises crystalline glass.

4. (Unchanged) An interposer as recited in claim 1, wherein the receiving end protrudes upwardly with respect to the substrate.

6. (Once Amended) An interposer as recited in claim 1, wherein the substrate comprises a material selected from the group consisting of glass, alumina, glass ceramic, nonmetallic nitride, aluminum nitride, nonmetallic carbide, and mixtures thereof.

D3 7. (Once Amended) An interposer as recited in claim 1, wherein the substrate comprises a nitride.

8. (Unchanged) An interposer as recited in claim 1, wherein the interposer further comprises an electrically insulating layer on a portion of the conductor between the receiving end and the terminal end.

D4 9. (Once Amended) An interposer as recited in claim 7, wherein the nitride comprises boron nitride.

10. (Thrice Amended) An interposer for electrically coupling a semiconductive device to an electrical apparatus, the interposer comprising:

D5 a sheet for coupling to an electrical apparatus, said sheet having a portion that has a uniform thickness, and said sheet comprised of an electrically insulating material, said sheet having an outermost surface for receiving thereon a semiconductive device such that said semiconductive device lies at least in part on said outermost surface and is unimbedded into said substrate; and

an electrical conductor on the portion, the electrical conductor having a receiving end on said portion for connecting to a semiconductive device at electrically conductive terminals of said semiconductive device such that at least some of said terminals are located in the region between said semiconductive device and said outermost surface of said sheet, and a terminal end on said portion for connecting to an electrical apparatus, such that the semiconductive device is electrically coupled to the electrical apparatus when the semiconductive device is connected to the receiving end of the electrical conductor and the terminal end of the electrical conductor is connected to the electrical apparatus, such that the coupling of said sheet to said electric apparatus structurally supports said sheet with said terminal end in electric contact with said electric apparatus.

D6 11. (Once Amended) An interposer as recited in claim 10, wherein the material comprises alumina.

12. (Once Amended) An interposer as recited in claim 10, wherein the material comprises crystallized glass.

13. (Thrice Amended) An interposer for electrically coupling a semiconductive device to an electrical apparatus, the interposer comprising:

D7 an electrically insulative sheet for coupling to an electrical apparatus, said sheet having a portion that has a uniform thickness, and said portion being composed of a material selected from the group consisting of devitrified ceramics, vitro ceramics, single oxide ceramics, and mixed oxide ceramics, and mixtures thereof, said sheet having an outermost surface for receiving thereon a semiconductive device such that said semiconductive device lies at least in part on said outermost surface and is unimbedded into said substrate; and

an electrical conductor on said portion, the electrical conductor having a receiving end on said portion for connecting to a semiconductive device at electrically conductive terminals of said semiconductive device such that at least some of said terminals are located in the region between said semiconductive device and said outermost surface of said sheet, and a terminal end on said portion for connecting to an electrical apparatus, such that the semiconductive device is electrically coupled to the electrical apparatus when the semiconductive device is connected to the receiving end of the electrical conductor and the terminal end of the electrical conductor is connected to the electrical apparatus, such that the coupling of said sheet to said electric apparatus structurally supports said sheet with said terminal end in electric contact with said electric apparatus.

14. (Thrice Amended) An interposer for electrically coupling a semiconductive device to an electrical apparatus, the interposer comprising:

D7
an electrically insulative sheet for coupling to an electrical apparatus, said sheet having a portion that has a uniform thickness, and said portion being composed of an electrically insulating material selected from the group consisting of alumina, alumina with silica, alumina with silicates, alumina with derivatives of silicates, and mixtures thereof, said sheet having an outermost surface for receiving thereon a semiconductive device such that said semiconductive device lies at least in part on said outermost surface and is unimbedded into said substrate; and

an electrical conductor on said portion, the electrical conductor having a receiving end on said portion for connecting to a semiconductive device at electrically conductive terminals of said semiconductive device such that at least some of said terminals are located in the region between said semiconductive device and said outermost surface of said sheet, and a terminal end on said portion for connecting to an electrical apparatus, such that the semiconductive device is electrically coupled to the electrical apparatus when the semiconductive device is connected to the receiving end of the electrical conductor and the terminal end of the electrical conductor is connected to the electrical apparatus, such that the coupling of said sheet to said electric apparatus structurally supports said sheet with said terminal end in electric contact with said electric apparatus.

15. (Thrice Amended) An interposer for electrically coupling a semiconductive device to an electrical apparatus, the interposer comprising:

D7
an electrically insulative sheet for coupling to an electrical apparatus, said sheet having a portion that has a uniform thickness, and said portion being composed of an electrically insulating material selected from the group consisting of boron nitrides, aluminum nitrides, and mixtures thereof, said sheet having an outermost surface for receiving thereon a semiconductive device such that said semiconductive device lies at least in part on said outermost surface and is unimbedded into said substrate; and

an electrical conductor on said portion, the electrical conductor having a receiving end on said portion for connecting to a semiconductive device at electrically conductive terminals of said semiconductive device such that at least some of said terminals are located in the region between said semiconductive device and said outermost surface of said sheet, and a terminal end on said portion for connecting to an electrical apparatus, such that the semiconductive device is electrically coupled to the electrical apparatus when the semiconductive device is connected to the receiving end of the electrical conductor and the terminal end of the electrical conductor is connected to the electrical apparatus, such that the coupling of said sheet to said electric apparatus structurally supports said sheet with said terminal end in electric contact with said electric apparatus.

39. (Unchanged) An interposer as recited in claim 7, wherein the nitride comprises nonmetallic nitride.

40. (Unchanged) An interposer as recited in claim 1, wherein the substrate comprises a carbide.

D8 41. (Once Amended) An interposer as recited in claim 40, wherein the carbide comprises nonmetallic carbide.

42. (Unchanged) The interposer as defined in Claim 13, wherein:
the portion of the sheet has a planar surface;
the electrical conductor is on the planar surface of the portion of the sheet;
the receiving end is on the planar surface of the portion of the sheet; and
the terminal end is on the planar surface of the portion of the sheet.

43. (Unchanged) The interposer as defined in Claim 14, wherein:
the portion of the sheet has a planar surface;
the electrical conductor is on the planar surface of the portion of the sheet;
the receiving end is on the planar surface of the portion of the sheet; and
the terminal end is on the planar surface of the portion of the sheet.

44. (Unchanged) The interposer as defined in Claim 15, wherein:
the portion of the sheet has a planar surface;
the electrical conductor is on the planar surface of the portion of the sheet;
the receiving end is on the planar surface of the portion of the sheet; and
the terminal end is on the planar surface of the portion of the sheet.

45. (Once Amended) An interposer for electrically coupling a semiconductive device to an electrical apparatus, the interposer comprising:

D9 an electrically insulative substrate for coupling to an electric apparatus, said substrate being comprised of a material selected from the group consisting of crystalline glass, nitride, and carbide, and mixtures thereof, said substrate having an outermost surface for receiving thereon a semiconductive device such that said semiconductive device lies at least in part on said outermost surface and is unimbedded into said substrate; and

an electrical conductor on the substrate, the electrical conductor having a receiving end for connecting to a semiconductive device at electrically conductive terminals of said semiconductive device such that at least some of said terminals are located in the region between said semiconductive device and said outermost surface of said substrate, and a terminal end for connecting to an electrical apparatus, such that the coupling of said substrate to said electrical apparatus structurally supports said substrate with said terminal and in electrical contact with said electrical apparatus.

D10 46. (Once Amended) The interposer as defined in Claim 45, wherein the nitride is a nonmetallic nitride.

47. (Once Amended) The interposer as defined in Claim 45, wherein the nonmetallic nitride is boron nitride.

48. (Once Amended) The interposer as defined in Claim 45, wherein the carbide is a nonmetallic carbide.